

BOOK REVIEW

Herpetology of China. Er-Mi Zhao and Kraig Adler. 1993. Society for the Study of Amphibians and Reptiles/Chinese Society for the Study of Amphibians and Reptiles. SSAR Contributions to Herpetology Number 10, St. Louis, Missouri. Available from: Robert D. Aldridge, Publications Secretary, Department of Biology, St. Louis University, 3507 Laclede, St. Louis, Missouri 63103, U.S.A. Price: US\$60.

China is a country of superlatives: this is one of the largest political units on earth, with a total land area of approximately 9.6 million sq km, has the highest human population (over a billion people) and a virtually unmatched habitat, as well as altitudinal and vegetational ranges. Predictably, the herpetofauna is one of the world's richest, with 661 species of amphibians and reptiles reported. This fauna has been the subject of studies that commenced from the time of Confucius (Fu-Tzu K'ung [Fu-Zi Kung] in Chinese), who lived between 551-479 B.C. Important contributors to the present day knowledge of the herpetofauna includes the early Chinese scholars, European explorers and most recently, the current generation of Chinese biologists who virtually dominate herpetological research in Asia. These studies have been summarized in a single, elegant volume by two of the world's most respected herpetologists, Prof. Er-Mi Zhao of the Chengdu Institute of Biology, China and Prof. Kraig Adler of Cornell University, U.S.A.

The book is impressive from the physical standpoint, the 522 pages being acid- and groundwood-free (and therefore will survive many years of use even in the field), bound in Roxite C-1 cloth (vellum finish). The production specifications at the end of the book indicate that 2,000 copies have been printed, and given the large number of herpetologists in China and students of east Asian herpetology, will soon be out of print.

The contents page follows a superb water colour by Chinese artist Yi-sheng Wang of a female *Draco maculatus*. The introduction includes sections of the purpose and organization of the book ("... to develop a historical context for current research and also to provide an introduction to contemporary Chinese researchers and their activities..."), acknowledgements and dedication and is followed by a history of herpetological studies in China. Pioneering herpetologists who collected and/or observed the herpetofauna are illustrated, where not possible by black-and-white photographs, by paintings from archives (sources mentioned on p. 522) and in the case of Confucius, by a line drawing. Details of faunal investigations conducted in the recent years (beginning in 1949) are listed by province, which are followed by a listing of herpetological research by discipline (including biochemistry, embryology, osteology and anatomy, ultrastructural studies, karyology, autecology, other ecological studies, parasitology and palaeontology). Miscellaneous issues discussed here include the herpetological studies in Hong Kong and Macao, the cooperative research programmes with foreign scientists, endangered and economically important species, Chinese herpetological journals and an account of the Chinese herpetological societies and meetings.

The second section is perhaps the most important in the book for modern scholars of

Chinese herpetology. This comprises a 26 page illustrated key to the genera of amphibians and reptiles of China. The line drawings are adequate, and show a wide range of usually external features for the rapid identification of genera, although some internal features, such as pectoral girdles, sections through digits and skeletal parts, sometimes accompany the dichotomous key. At the end of every juncture, following the name of the genera, readers are led on to pages and plates dealing with these taxa that follow the key.

The colour plates start with a spectacular satellite image of eastern Asia, including all of China. The subsequent 43 plates illustrate virtually all genera of Chinese amphibians and reptiles with colour photographs, and in the case of a few species, such as *Pelophryne scalpta*, *Micrixalus xizangensis*, *Theloderma leprosa kwangsiensis*, *Amphiesmoides ornaticeps* and *Atridium yunnanensis*, where photos evidently were unavailable, with colour paintings and/or photos of preserved specimens. Four plates show the habitat diversity of this great country, from the Eastern Steppe Subregion, Nei Mongolia to highly urbanized Che Kei Shan (Victoria Park), in Hong Kong.

The annotated checklist of genera, species and subspecies of amphibians and reptiles known from China that follows is a 187 page section, the introductory section detailing the order of entries, generic entries and type entries, scientific name usage followed by the authors, a discussion of authorship, date and validity of publication, literature citation, type localities and ranges of species, which discusses nomenclature of localities. Taxa accounts include name, authority, date, followed by a complete synonymy, including information on type locality, range within and outside China and where appropriate, additional taxonomic notes.

Subsequent to the checklist is a 32 page section on the distribution of Chinese amphibians and reptiles, which includes a description of the seven zoogeographic regions within the country, that are illustrated with the help of a within-text figure and can be compared with a fold-out relief map of China and its surrounding regions. A province-by-province inventory of recorded species is provided after a brief description of the location and physiography of each area, and is followed by a series of charts showing the occurrence of all known species in each province as well as each zoogeographic unit.

The Annotated Bibliography that follows demonstrates the meticulous care taken by its authors in preparing this magnificent volume. The subsections include general references (including general biology and natural history, checklists, major taxonomic groups, venomous snakes and snake venoms and snake bite), regional references (which includes references to the herpetology of China in general, as well as those of each of her provinces, plus Hong Kong and Macao) and of surrounding countries (including multinational regional reviews, as well as 19 country/region-wise bibliographies). Finally, the references actually cited in the text are cited, and the section concludes with a list of abbreviations used in the literature citations and places of publication.

The usefulness of the book is increased with the inclusion of three appendices. One includes Chinese geographical names (which includes the official abbreviation, the Pinyin form of the abbreviation, the Pinyin name for the political unit, and finally, the Wades-Giles spelling [as is familiar to most readers outside China]), Pinyin and minority language equivalents for geographical terms (such as *Co*, the Chinese for 'lake') and a list of current names and locations for localities (the gazetteer including literature names, modern equivalent, province or political unit and their geographical coordinates). The second appendix (by John E. Simmons, of the Museum of Natural History, University of Kansas, U.S.A.) details methods